REMARKS

The telephone interview with Examiner Brown, held on October 5, 2004, was appreciated. These Remarks summarize the points made during the interview by the undersigned attorney in favor of the patentability of the pending claims over the two references applied, and, at the same time, responds to the rejections made in the Office Action dated May 21, 2004.

The outstanding Office Action rejects the pending patent application claims as obvious over a combination of U.S. patents nos. 6,309,275 ("Fong") and 4,807,052 ("Amano"). The application contains two independent claims, apparatus claim 24 and method claim 29. It was stressed during the interview that each of these claims specifies two features that are suggested by neither of the cited references, as summarized below.

Claim Feature 1: Multiple Records Stored in the Receiver Individually Link Remote IR Signal Patterns with Specific Receiver Functions to be Performed in Response to Receipt of One of the Patterns

The pending claims specify that a plurality of records are stored in the memory of the receiver and which individually link signal patterns emitted by a remote control to specific functions to be performed by the receiver, such a muting the sound, volume up or down, and the like. When a specific signal pattern is received, a selected one of the records containing data of that pattern then provides the specific function that is to be performed by the receiver. Claim 24 recites this feature as follows:

> the individual records additionally including a link *within the record* of one or more signal patterns emitted by one of the remote controls with at least one specific function, (emphasis added)

And Claim 29 contains the following limitation:

> the individual records storing one or more signal patterns that are individually linked *within the record* with one of the one or more functions to be performed by the device, (emphasis added)

This feature is illustrated in the present application specification primarily by the example of Figure 5, which is described in the middle paragraph on application page 8. The individual records contain bit patterns 77-81 for respective volume up, volume down and mute functions of the receiver. Multiple such records are described to be stored in the memory 55 of the receiver

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of Figure 2 in order to be able to recognize signals from different remote controls. When the appropriate record is accessed that corresponds to the remote control being used, a particular received bit pattern is mapped within that record to control the function specified by use of the one record. Others of the records are not used.

The Amano patent has been cited as disclosing this feature but it is respectfully submitted that Amano describes a different arrangement. A single such record is stored in the receiver for the remote control 32A. When the signal patterns of second remote control 32B are learned by the receiver, a second record is created but this record links the signal patterns of the second remote control with those of the first remote control that cause the same functions to be performed. (see Amano patent, col. 8, ln. 64 – col. 9, ln. 11). That is, there is only one record in the Amano patent that links the signals emitted by one remote control with the receiver functions to be performed, that being permanently stored in the receiver. The second record links the signals emitted by the second remote control with entries of the first record, not with the functions to be performed. There are no multiple records that individually link "within the record" (claims 24 and 29) the received remote control signal patterns with the receiver functions to be performed.

Looking at the Amano reference in more detail, a first set of remote control codes RC1A – RC1N are related to specific functions of the receiver to be performed when each of the codes is received from the first remote control 32A. A second set of codes RC2A – RC2N learned from the second remote control 32B are not stored in this type of record. Rather, the record for the codes RC2A – RC2N links those codes to the first set of codes RC1A – RC1N. Instead of specifying *within the second record* the function to be performed when one of the second set of codes RC2A – RC2N is received, this second record refers instead to the contents of the first record of the codes RC1A – RC1N. The second record does not link the codes RC2A – RC2N to the functions to be performed, contrary to what is claimed.

Reconsideration is respectfully requested.

Claim Feature 2: The Search Technique to Find in Multiple Records the Data of the Signal Pattern Being Received from the Remote Control

The application claims specify that one of the multiple remote control records is first identified by finding one that corresponds to the signal pattern being received, and then the

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incoming signal pattern is compared with the entries of the identified record to find a match. The matched entry provides the receiver function designated by the remote control signal. This is described in the application specification with respect to the flowchart of Figure 6, and is to be contrasted with a search technique that simply compares the received signal pattern with each entry of every record in sequence until a match is found, which is what the Amano patent describes.

The Amano patent describes its search process beginning at line 19 of column 8, and extending through line 11 of column 9. The individual remote control signal data of the first record are first compared with the incoming signal pattern, one entry at a time. If a positive comparison does not occur by searching the first record, then the entries of the second record are compared with the incoming signal pattern, one at a time, until one is found that matches.

Independent claims 24 and 29 each specify a two-step search technique. In the first step, the receiver identifies which of the multiple records match the "signal pattern protocols" (claim 24) or correspond "to the type of remote control" (claim 29) that is emitting the signal pattern. Only after one record is selected as corresponding to the remote control signals being received is the received signal pattern compared with the individual data entries of the selected record to find a match. This is clearly different than the one-step technique Amano describes of simply comparing the received remote control signal pattern with the individual entries of both its records, one at a time, until a match is found.

The Office Action (last paragraph of p. 2) additionally alleges that the Fong patent describes this claimed feature but it is not seen that the cited portion of the Fong patent (figure 2 and col. 13, lns. 35-40) describes anything about the receiver searching multiple remote control records. Another statement in the Office Action (p. 3, lns. 14-16) states that Fong is ".. not explicit in teaching the receiver of the wireless control signal simultaneously storing protocols of the control signal emitted by a plurality of remote control[s]." Indeed, that is why the Amano patent is cited. If the Fong patent does not disclose a receiver that stores data of multiple remote control signal protocols, as stated in the Office Action, then a process for identifying a signal data entry from multiple records also cannot be described.

Reconsideration is respectfully requested.

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Conclusion

Although it is submitted that the pending claims define both of the two novel features stressed above, and are allowable for that reason, the obviousness rejection would have to be withdrawn if only one of these features was to be held undisclosed by the cited Fong and Amano patents.

Accordingly, it is believed that this application is now in condition for allowance and an early indication of its allowance is solicited. However, if the Examiner has any further matters that need to be resolved, a telephone call to the undersigned attorney at 415-318-1163 would be appreciated.

Respectfully submitted,

Gerald P. Parsons   October 5, 2004
Gerald P. Parsons   Date
Reg. No. 24,486

PARSONS HSUE & DE RUNTZ LLP
655 Montgomery Street, Suite 1800
San Francisco, CA 94111
(415) 318-1160 (main)
(415) 318-1163 (direct)
(415) 693-0194 (fax)

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